

Amendments to the Drawings

Please replace the original fifth sheet of drawings (containing FIGS. 5(a) through 5(e)) with the attached replacement sheet.

The replacement sheet is the same as the original, except that reference number "11" has been changed to "10" in FIG. 5(b).

Remarks/Arguments

Claim Summary

By this Amendment, claims 10-11, 13, 17-22, 24 and 27 have been cancelled without prejudice, claims 23, 25-26 and 28 have been revised, and new claims 29-32 have been added.

Claims 23, 25-26 and 28-32 are now pending in the application.

Specification and Drawings

By this Amendment, the specification and drawings have been revised to correct the informalities identified by the Examiner. No new matter has been added.

It is respectfully noted that the use of section headings in the specification is merely suggested (not required) by the PTO guidelines.

Claim Objections

By this Amendment, claim 10 has been revised as suggested by the Examiner.

35 U.S.C. ¶102 and ¶103

Claims 10-13, 17 and 21-22 were rejected under 35 U.S.C. ¶102 or ¶103 as being unpatentable over Bjorkman et al. (US 6340435) for the reasons stated at pages 6-8 of the Office Action.

This rejection has been rendered moot by the cancellation of claims 10-13, 17 and 21-22.

35 U.S.C. ¶103

Claims 18-19 and 23-27 were rejected under 35 U.S.C. ¶103 as being unpatentable over Bjorkman et al. (US 6340435) in view of Chooi et al. (US

6436824) for the reasons stated at pages 9-10 of the Office Action. Applicants respectfully traverse this rejection with respect to the now-pending claims.

Without acquiescing to the Examiner's reasoning, independent claims 23 and 25 has been revised herein to more clearly define over the cited references. In particular, each of these claims has been revised to recite the dielectric constant of the claimed layers as being less than 3.0. Support for this limitation can be found at least at page 3, line 19, of the present specification.

The cited references, taken individually or in combination, do not teach or suggest the stack of dielectric layers as recited in the present claims in which dielectric constants (k) of the layers is less than 3. In this regard, it is noted that at the bottom of page 6 and top of page 7 of the present specification, Applicants disclose a methyl doped silicon carbide/nitride layer with a k value of approximately 2.6. It is then indicated that if the carbon to nitrogen ratio is changed then the k value can increase up to 4.6. Lower down on page 7, a methyl doped silicon dioxide having a k value of 2.6 is also disclosed. The cited references do not teach or suggest a manner of fabricating the claimed layers having a k value of less than 3.

Further, Chooi does not have anything to say about the etched characteristics of the dielectric material at the bottom of column 4, and thus a person skilled in the art would not know one way or the other if this was a suitable material to insert in the Bjorkman arrangement. Note that Bjorkman, for example, at column 7 lines 49-56, is requiring that one of the dielectric layers has an etch rate of at least three times greater than the etch rate of the etch stop layer. Also in the summary of the invention Bjorkman is requiring an etch selectivity of greater than 3:1. It would not be obvious to one of ordinary skill in the art to apply the layer(s) of Chooi in the arrangement of Bjorkman.

For at least the reasons stated above, Applicants respectfully contend that claims 23, 25-26 and 28-32 are not obvious in view of the teachings of the cited references.

Conclusion

No other issues remaining, reconsideration and favorable action upon the claims 23, 25-26 and 28-32 now pending in the application are requested.

Respectfully submitted,

VOLENTINE FRANCOS & WHITT, PLLC



Adam C. Volentine
Reg. No. 33,289

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Customer No. 20987

Volentine Francos & Whitt, PLLC
11951 Freedom Drive, Suite 1260
Reston VA 20190
Tel. (703) 715-0870
Fax (703) 715-0877